

Claims

We claim:

- 1 1. A message-passing system, comprising:
 - 2 a. a first client system configured to transmit a message packet containing a priority
 - 3 to a second client system; and
 - 4 b. a second client system configured to receive the message packet from the first
 - 5 client system and process the message packet based on the priority.
- 1 2. The message-passing system of claim 1, wherein the message packet is transmitted from
- 2 the first client system to the second client system according to a transport protocol.
- 1 3. The message-passing system of claim 2, wherein the transport protocol is TCP/IP.
- 1 4. The message-passing system of claim 2, wherein the transport protocol is NetBUI.
- 1 5. The message-passing system of claim 1, wherein the message packet is formatted
- 2 according to an SGML standard.
- 1 6. The message-passing system of claim 5, wherein the SGML standard is XML.
- 1 7. The message-passing system of claim 6, wherein the message packet comprises text data.
- 1 8. The message-passing system of claim 6, wherein the message packet comprises a virtual
- 2 object.

- 1 9. The message-passing system of claim 1, further comprising a first message server
2 coupling the first client system to the second client system, the first message server
3 providing a communication path between the first client system and the second client
4 system.
- 1 10. The message-passing system of claim 9, further comprising a log server coupled to the
2 first message server, the log server configured to store log data for the message packet.
- 1 11. The message-passing system of claim 9, further comprising a diagnostics server coupled
2 to the first message server, the diagnostics server configured to store log data for the
3 message packet.
- 1 12. The message-passing system of claim 9, further comprising:
2 a. a second message server coupled to the first client system and the second client
3 system, the second message server providing a communication path between the
4 first client system and the second client system; and
5 b. a load balancer coupling the first client system to both the first message server and
6 the second message server, the load balancer further coupling the second client
7 system to both the first message server and the second message server.
- 1 13. The message-passing system of claim 1, further comprising a manufacturing equipment
2 having an associated parameter, the manufacturing system coupled to the first client
3 system, wherein the first client system is configured to monitor the associated parameter,
4 generate the priority based on the parameter, generate the message packet containing the
5 priority, and transmit the message packet to the second client system.

- 1 14. The message-passing system of claim 13, wherein the manufacturing equipment
2 comprises a semiconductor processing system.
- 1 15. A method of passing a message packet between a first client system and a second client
2 system, the method comprising:
- 3 a. generating a message packet containing a priority on the first client system;
4 b. transmitting the message packet from the first client system to the second client
5 system;
6 c. receiving the message packet on the second client system; and
7 d. processing the message packet on the second client system according to the
8 priority.
- 1 16. The method of claim 15, wherein the message packet is transmitted from the first client
2 system to the second client system according to a transport protocol.
- 1 17. The method of claim 16, wherein the transport protocol is TCP/IP.
- 1 18. The method of claim 16, wherein the transport protocol is NetBUI.
- 1 19. The method of claim 15, wherein generating a message packet comprises formatting a
2 message according to an SGML standard.
- 1 20. The method of claim 19, wherein the SGML standard is XML.
- 1 21. The method of claim 20, wherein the message packet comprises text data.
- 1 22. The method of claim 20, wherein the message packet comprises a virtual object.

- 1 23. The method of claim 15, further comprising storing log data for the message packet.
- 1 24. The method of claim 15, wherein transmitting the message packet comprises:
- 2 a. transmitting the message packet to a message server based on a load of the
- 3 message server; and
- 4 b. transmitting the message packet from the message server to the second client
- 5 system.
- 1 25. The method of claim 15, wherein generating a message packet comprises encrypting a
- 2 message and including the encrypted message in the message packet.
- 1 26. The method of claim 25, wherein processing the message packet comprises decrypting
- 2 the encrypted message in the message packet.
- 1 27. The method of claim 15, further comprising before the step (a):
- 2 a. reading a parameter associated with a manufacturing equipment; and
- 3 b. generating the priority based on the parameter.
- 1 28. A sending client system configured to transmit a message packet containing a priority to a
- 2 receiving client system, the receiving client system configured to process the message
- 3 packet based on the priority.
- 1 29. The sending client system of claim 28 comprising a messaging module, the messaging
- 2 module configured to assign a priority to a message to form the message packet, the
- 3 messaging module further configured to transmit the message packet to the receiving
- 4 client system according to a transport protocol.

- 1 30. The sending client system of claim 29, wherein the transport protocol is TCP/IP.
- 1 31. The sending client system of claim 29, wherein the transport protocol is NetBUI.
- 1 32. A receiving client system configured to receive a message packet containing a priority
2 from a sending client system, the receiving client system configure to process the
3 message packet based on the priority.
- 1 33. The receiving client system of claim 32 comprising a messaging module, the messaging
2 module configured to receive the message packet from a sending client system according
3 to a transport protocol, the messaging module further configured to process the message
4 packet based on the priority.
- 1 34. The receiving client system of claim 33, wherein the transport protocol is TCP/IP.
- 1 35. The receiving client system of claim 33, wherein the transport protocol is NetBUI.